

Name _____
Date _____ Block _____

NUMBER TRICKS - FEATS TO IMPRESS YOUR FRIENDS

For each number trick:

1. Experiment with different numbers. Try to find a pattern or shortcut for getting the answers.
2. Have someone give you the starting number(s) and test out the theory you developed in #1.
3. If your theory worked, try to prove it with basic algebra. If your theory didn't work, go back up to #1, try some more numbers, and make a new theory.

A9 Sheet 1 – Trick 1

Consecutive sum

In this sum you add consecutive numbers.

The audience changes the top number and tells you what it is.

You immediately give the total.

How is the trick done?

Can you make the trick more impressive?

	23
	24
	25
	26
+	27
Total	125

A9 Sheet 2 – Trick 2**Pyramid**

		63		
	18	21	24	
5	6	7	8	9

The bottom row of this pyramid contains consecutive numbers.

Each other number is found by adding the three numbers beneath it.

The audience changes the bottom left hand number and tells you what it is.

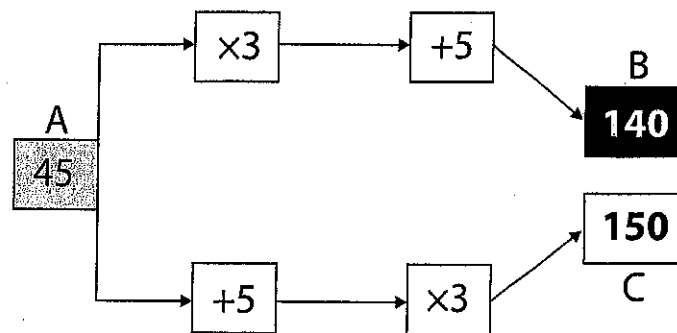
You immediately say what the top number is.

How is the trick done?

Try to make the trick more impressive.

A9 Sheet 3 – Trick 3

Routes



You are blindfolded.

The audience changes the number in box A.

The audience tells you the number in box B.

You immediately say the number in box C.

How is the trick done?

Can you make the trick more impressive?

(You can change the $\times 3$ and $+5$ to other numbers if you want.)

A9 Sheet 4 – Trick 4

Adding pairs

5	10	15	25	40	65
---	----	----	----	----	----

Each number is the sum of the two previous numbers.

The audience changes the numbers in the two left hand boxes.

You immediately say the number in the right hand box.

How is the trick done?

Try to make the trick more impressive.

A9 Sheet 5 – Trick 5**Calendar**

Mon	Tues	Wed	Thur	Fri	Sat	Sun
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

The audience moves the window to cover 8 dates.

They add the 8 dates together and tell you the total.

You immediately tell them the number in the middle of the window.

How is the trick done?

Try to make the trick more impressive.

Mon	Tues	Wed	Thur	Fri	Sat	Sun
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				